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Revised

Drinking Water State Revolving Fund Loan Program

2013 Guidelines

These guidelines define the application requirements and review process for the 2013 Drinking Water State Revolving Fund (DWSRF) Loan Program.

Congress created the DWSRF in 1996 when it reauthorized the Safe Drinking Water Act (SDWA). Each year through this program, the U.S. Environmental Protection Agency (EPA) awards a capitalization grant to Washington and other states for:

- A capital construction loan program.
- Non-construction "set aside" funds to run the program and ensure compliance with drinking water rules.

The Department of Health Office of Drinking Water (DOH) and the Department of Commerce's Public Works Board (Board) and Contract Administration Unit (CAU) jointly administer the DWSRF Loan Program. Our scoring process gives funding priority to projects that address severe public health threats and compliance issues. Details of the scoring process are in Appendix A of this document (page 20).

DWSRF Loan Program Description and Goals

The Washington State Legislature passed laws to create a DWSRF Loan Program consistent with federal law. Loan repayments, loan interest, and additional state funding from the Public Works Assistance Account supplement the federal capitalization grant.

The DWSRF Loan Program provides low-interest construction loans to publicly owned (municipal) and privately owned drinking water systems in Washington. Municipal water systems are defined by the Safe Drinking Water Act as "a city, town, or other public body created by or pursuant to state law," such as special purpose districts and public utility districts. The DWSRF Loan Program goals are to:

- Provide loans to water systems for capital improvements that increase public health protection and compliance with drinking water regulations.
- Protect the health of the people of Washington State by ensuring safe and reliable drinking water.

Funding Schedule

The 2013 DWSRF Loan Program application deadline is **March 1, 2013**. We have revised these guidelines to reflect the new requirements in the following ways:

- Changing the loan terms to define criteria and eligibility for principal forgiveness (page 5).
- Readiness to proceed (page 14).
- Project implementation (page 15).
- Adding information about new Buy American Act requirements (page 19).

The 2013 application is on our DWSRF webpage at
http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/DrinkingWaterStateRevolvingFundDWSRF.aspx
DOH will review, score, and rank applications—publishing a draft funding list in summer of 2013. The Public Works Board will approve the final funding list in fall of 2013.

Important Information About the DWSRF Funding Process

Privately owned water systems with funding requests under $50,000 should contact program staff (listed at the end of this document) to discuss your funding needs before submitting an application.

It takes about 6 months from the time you apply to find out if you will get a DWSRF loan. That means you should not rely on the DWSRF Loan Program as a quick-fix solution to cash flow or emergency repair problems. Here are some important things to know about the loan program:

- You must complete your project within 4 years of signing a funding contract with us.
- To get a loan, your system must be financially healthy and able to repay the loan.
- Since we use a reimbursement process, you must have some of your own funds to start work on the project. You can receive reimbursement for eligible project costs later, if you receive funding.
- If you pay for any preconstruction work directly related to this project in anticipation of being reimbursed later, be advised that you do so at your own risk because you may not receive funding.
- If we offer you funding, you will sign a contract with the Board.
- The Board will provide an overview of the program and the contract requirements.
- A 1 percent loan fee is assessed at contract execution, amortized over the life of the loan.
- You can only request reimbursements for construction after DOH approves your project to begin construction, and you successfully complete your environmental and cultural review.
- The Board will withhold 10 percent of your funding amount until you officially close out the project. Once this is done, the Board will reimburse the withheld 10 percent to you.
- A project can only be closed out when:
  - DOH receives and approves construction completion documents.
  - DOH receives and approves any required as-built drawings.
  - The Board receives the financial audit report (if required).

Online application
Visit our website at http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/DrinkingWaterStateRevolvingFundDWSRF.aspx to get started. You will need to first establish an account with Secure Access Washington (SAW). In addition to ease of access and better accuracy, systems will be able to create and attach project maps, photos, and supplemental documentation. Detailed instructions are located within the application.

Subsidy
We are providing some principle forgiveness again this year. Rather than basing forgiveness on median household income (MHI) we will be basing it on an **Affordability Index** (percentage of MHI that the average water bill will be **AFTER** the loan). Those projects where the average monthly water rate will exceed 2 percent of the MHI for the service area will qualify. There are updated criteria for the consolidation projects that qualify for principal forgiveness. Systems applying that feel they will qualify based on the affordability index **MUST** provide MHI information with the application to be considered. Please see the chart on page 5 for loan terms.

Systems that have affordability index between 1.5 and 2.0 percent may be offered a lower interest rate.

Not all systems that qualify for subsidy and are on the list may necessarily receive it. There will be a set amount available and it will be given based on project score.

Planning Documents
All applicants must have an approved water system plan (WSP), a small water system management program (SWSMP), or plan amendment containing your DWSRF project prior to application. This is in response to EPA's new Sustainability Policy for DWSRF. Please contact your Regional Planner (http://www.doh.wa.gov/portals/1/documents/4200/Planner-map.pdf) if you have questions concerning your planning documents.

Supplemental Financial Information
The Public Works Board is requiring supplemental financial information for all water systems that are requesting drinking water state revolving funds. Complete the DWSRF supplemental financial information form located on our website (http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/PublicationsandForms/Forms.aspx#DWSRF) and attach it to your DWSRF application.

Required Investment Grade Efficiency Audit
A new Washington State law requires all public water systems that receive loans or grants for infrastructure to complete an investment grade efficiency audit (IGEA). This is an effort to apply energy efficiency to water systems, similar to DOH's Green Projects that was started in 2009.

What IGEA Means for You
Water systems are required to do the IGEA. You may finance your audit as part of your drinking water state revolving loan. The audit can be prepared by your power provider or an energy services company (ESCO). More information is available in this presentation on *Infrastructure Financing: "New Requirements for Energy Efficiency"* (http://www.doh.wa.gov/Portals/1/Documents/4200/IGEA.pdf).

Seven Steps for Your IGEA

1. Investigate all areas of energy and water use in your water system that coincide with your DWSRF scope of work.
2. Identify systems (processes and buildings) with sufficient consumption to make significant savings possible. The cost of the savings must be paid back within 6 years; otherwise it isn't considered cost effective for our DWSRF process.
3. Use all available information to determine the theoretical energy requirement and actual energy consumptions of those systems. Available information includes half-hourly data, gas and fossil fuel use profile, degree-day heating and cooling data, water consumption, building structure, occupancy, location, ventilation and internal dissipation, natural light, and production data.
4. Determine the energy efficiency of each system component. Divide the theoretical energy requirement by the actual energy consumption.
5. Identify all significant viable energy and carbon reduction opportunities within the inefficient systems, which may require the use of energy analyzers, data-loggers and other measuring equipment.

   This may involve:
   - Checking the combustion efficiency of all significant combustion plants.
   - Assessing standing and other losses.
   - Investigating the operation and capabilities of any Building Energy Management Systems.
   - Considering the scope for building fabric improvements and the resulting opportunities for the specification of smaller and thus more cost-effective plants.
   - Identifying where beneficial additional management effort should be directed, the measures necessary for improving staff performance, and additional sub-metering, and other related matters.
6. Analyze the potential of renewable energy opportunities and technologies.
7. Report on all of the above. Provide an accurate assessment of the potential energy and carbon reductions along with details of the specific measures required for implementation, illustrative costs, and payback periods.

For guidance on how to proceed with a preliminary audit, or to learn more about this requirement, call Roger Wigfield, energy program manager at the Department of Enterprise Services, at 360-407-9371 or email roger.wigfield@des.wa.gov

Loan Terms for 2013 Project Loan Applications

Income Level of Households	Interest Rate	Loan Fee	Loan & Fee Repayment Period
Water system is not economically disadvantaged	1.5% fixed	1% at loan execution*	20 years or life of the project, whichever is less
Water system with an affordability index between 1.5 and 2.0%	1% interest on loan	1% at loan execution*	20 years or life of the project, whichever is less
Water system with an affordability index between 2.01 to 3.5%	30% Principal Forgiveness & 1% interest on loan	**	20 years or life of the project, whichever is less
Water system with an affordability index of 3.51% or higher	50% Principal Forgiveness & 1% interest on loan	**	20 years or life of the project, whichever is less
Eligible restructuring/consolidation projects proposed by municipal Group A water systems. Projects must result in a change in ownership prior to signing the funding contract (page 7).	50% Principal Forgiveness & 1% interest on loan	**	20 years or life of the project, whichever is less
Maximum Award			
The maximum of $12,000,000 can be awarded to each water system/entity applying this loan cycle. Multiple owners of one project (shared facilities) or satellite management agencies that are restructuring (combining) systems may combine loan limits up to a maximum of $24,000,000.			
Local Match Requirement			
No local match is required.			
Loan Fees			
*The loan fee is not subject to the loan limit. For example, if a project is budgeted at $3 million, the applicant can apply for a $3,030,000 loan ($3 million for the project plus the $30,000 loan fee). The loan fee is assessed at contract execution. Loan fees are non-refundable. **Water systems receiving subsidy are not subject to loan fees.			

Principal Forgiveness

Principal forgiveness means that you don't have to pay back a portion of the loan principal. If you qualify for principal forgiveness, you will still have to pay interest on the loan portion of your award, but no loan fee. Unless your project is an eligible restructuring project (page 7), to qualify for principal forgiveness you will need to provide proof of water system income levels determined by one of the following:

- The most recently conducted U.S. Census for your community, if available.
- An independently conducted income survey of your community, using the IACC Income Survey Guidelines, available at http://www.infrafunding.wa.gov Call Myra Baldini at 360-725-3152 or email myra.baldini@commerce.wa.gov with questions.

This information must be submitted with your loan application.

Eligibility Requirements

Eligible Applicants

- Publicly or privately owned Group A community water systems. Homeowners' associations must submit articles of incorporation.
- Transient or nontransient noncommunity public water systems owned by a nonprofit organization. Nonprofit noncommunity water systems must submit tax-exempt documentation.
- Water system owned by an Indian tribe. The water system must meet all capacity requirements and the proposed project may not receive SDWA national set-aside funds for Indian tribes.
- Group B or individual water supply systems that meet the special eligibility requirements below.

Ineligible Applicants

- Noncommunity public water systems owned by a for-profit organization.
- State or Federally owned water systems.
- Systems lacking the technical, financial, and managerial capability to ensure compliance, financial health, and loan repayment.

Special Eligibility Requirements for Group B or Individual Water Supply Systems

Group B or individual water supply systems applying for DWSRF funding must meet ***all*** of the following requirements:

- When the project is complete, the system(s) will be one Group A community water system.
- The applicant has a history of sound system operations and management, and is financially healthy.
- The applicant has the technical, operational, managerial, and financial capacity necessary to manage the project and the water system.
- The project must fix existing public health problems that pose serious risks.
- The project scope must be limited to the specific geographic area affected by any contamination.
- The project must be a cost-effective solution to the public health problem.

- Applicants must sufficiently notify potentially affected parties about the proposed project.
- The applicant must show they considered alternative solutions to address the problem.
- Population growth and related water system expansion is not the primary focus of the proposed project.

Project Eligibility Requirements

- Project must focus primarily on construction.
- Project must focus primarily on one identified problem or need, such as treatment, a new reservoir, or infrastructure repair/replacement. If your project has more than one focus, we may require you to re-submit each as a separate application. Contact DOH program staff for guidance if you are unsure about the focus of your project.
- Project must address the water system's existing public health and/or compliance issues (such as state or federal enforcement action; significant noncompliance with any federal or state drinking water regulation; red, yellow, or blue operating permit related to infrastructure) unless the issue is being addressed with other funding.
- Retroactive funding of previously-constructed municipal projects is eligible, as long as the project addressed surface water or ground water under the influence of surface water; primary chemical contaminants (Risk Categories 2 and 3); or a compliance order. Retroactive projects are eligible if construction occurred after July 1, 1993. Projects constructed after January 1, 2009 receive a higher score. Retroactive financing projects must meet all funding requirements retroactively to be eligible for funding.
- Eligible projects include:
  - New source.
  - Source reconstruction.
  - Disinfection improvements/treatment.
  - Filtration.
  - New reservoir or reservoir improvements.
  - Treatment plant discharge improvements.
  - Water main or distribution improvements (including main extensions to connect to safe and reliable drinking water sources; booster pumps; and seismic improvements).
  - Replacing aging infrastructure or making distribution improvements to maintain compliance or further protect public health. Such projects may include pressure reduction devices, backflow prevention assemblies, security measures, telemetry, and additional source for emergencies or additional capacity.
  - Restructuring and consolidation projects to take over non-compliant, failing or struggling water systems (see below for further eligibility requirements for these types of projects).
  - Security measures, as a stand-alone project.
  - Backflow prevention as a stand-alone project.

Special Eligibility Requirements for Restructuring and Consolidation Projects

Only municipal Group A water systems are eligible to apply for DWSRF funding for restructuring and consolidation projects that involve a change of ownership prior to executing the funding contract. Restructuring and consolidation projects are those that will acquire other non-compliant, failing or struggling public water systems that have water quality problems or deteriorated infrastructure.

Additionally, applicants must demonstrate a track record of sound drinking water utility management, meeting the following criteria:

- Own at least one Group A public water system.
- Have a minimum of 5 years' experience as a Group A water system.
- Have an approved water system plan for the applicant system, or be an approved satellite management agency.
- Have had no state or federal civil penalties in the past 5 years.
- Have received no unilateral enforcement orders from EPA or DOH in the past 5 years.
- Have not had a system's operator license suspended or revoked in the past 5 years.
- Are current with DOH fee payment schedule.

We may consider other eligibility criteria on a case-by-case basis including operating permit history, prior contract performance, and history of audit findings.

Water System Capacity Eligibility Requirements

The DWSRF Loan Program requires a current, DOH-approved Water System Plan or Small Water System Management Program that includes your project and demonstrates your *capacity*, or financial, technical, and managerial ability to:

- Successfully run the water system.
- Complete the proposed project.
- Repay the loan.

Additional capacity requirements for the DWSRF Loan Program include:

- Demonstrating financial health and ability to repay the loan.
- Demonstrating the proposed project is ready to proceed.

Source and Service Meter Eligibility Requirements

Installation of source and service meters is not an eligible stand-alone project. However, for a proposed project to be eligible for funding, water systems must have source meters on all existing and proposed new sources of water supply, or must include source metering as part of the proposed project. In most cases, systems must also have service meters on all existing connections or must include service meter installation as part of the proposed project. We will award bonus points to projects that include installing service meters on unmetered services (see Appendix A).

Some applicants may be able to receive a service meter exemption. However, you must request the exemption in writing. If you receive a service meter exemption, you will not receive any bonus points for service meter installation.

If requested, DOH may provide service meter exemptions to:

- Transient noncommunity systems.
- Mobile home parks or apartment complexes with master meters.
- Other water systems on a case-by-case basis, if we determine the cost of the meters is too high for the DWSRF project as a whole, and waiving the meter requirement is necessary to move the project forward and promote priority public health issues.

Preconstruction Eligibility Requirements

If you receive a funding offer, you can receive reimbursement for any eligible preconstruction costs you already paid, regardless of when the preconstruction activities were completed. Eligible preconstruction costs cover activities directly related to the project. Eligible preconstruction activities include:

- Small Water System Management Program and Water System Plan amendments (preparation and submittal costs).
- Design and engineering.
- Project report and construction documents.
- Environmental and cultural review.

We will only reimburse you for preconstruction costs if you receive a DWSRF loan, the costs are directly related to the project, and you have proper documentation showing you already paid for these costs.

Construction Eligibility Requirements

Don't begin construction under any circumstances until the following occur:

1. We notify you that you will be receiving DWSRF funding.
2. You submit any required project report and construction documents to DOH, *and* the Regional Engineer approves those documents.
3. You sign your DWSRF contract and return it to Public Works Board.
4. You follow the bid requirements detailed in the Public Works Board DWSRF contract handbook.
5. You consult with DOH about your required environmental and cultural review, *and* you receive a Final Completion Letter.

It is critical that you talk with DOH staff about your project's status and these conditions. Ask for help if you need it!

Phased or Staged Projects

You may need to separate a complex project into stages or phases to accomplish your goals. DOH reserves the right to require you to amend your application to address phasing or staging needs. We encourage you to discuss phasing or staging with program staff.

Eligible Activities and Project Costs

The following activities are eligible for reimbursement if they relate directly to an eligible, funded DWSRF project:

- Preconstruction activities (engineering, Water System Plan and Small Water System Management Program preparation, design, legal, financial, environmental and cultural review, permitting, and surveying) directly related to an eligible capital construction project.
- Purchase costs for publicly owned water system to acquire or restructure troubled water systems.
- Construct main extensions to connect to safe and reliable drinking water.
- Replacing aging equipment and infrastructure.

- Buy real property from a willing seller if it is an integral part of a capital construction project. If you use DWSRF funds to purchase real property, and you sell or rent any portion of that property, we will deduct any resulting profits from your reimbursement. Reimbursements include:
  - Purchase of land and easements.
  - Purchase of roads, buildings, fences, or other structures.
  - Salaries, expenses, or fees for appraisers, negotiators, or attorneys.
  - Removal or demolition of roads, buildings, fences, or other structures.
  - Other direct costs associated with real property acquisition.
- Competitive bidding costs.
- Contracted construction costs.
- Labor costs including salaries and wages at actual or average rates. Administrative and project management labor costs are not eligible unless they apply to the following activities and are no more than 3 percent of the funding amount:
  - Pre-design engineering.
  - Design engineering.
  - Construction engineering.
  - Acquiring land or rights of way.
- Purchase and installation of source meters.
- Purchase and installation of service meters as part of an eligible project, including:
  - Purchasing meters.
  - Line locating.
  - Labor.
  - Excavation.
  - Disinfection and flushing of connections.
  - Replacing or repairing mains damaged during meter installation.
- Clear wells associated with treatment and co-located with the treatment facility.
- Distribution reservoirs (finished water).Security measures, including:
  - Enhanced filtration and disinfection (for biological agents).
  - Enhanced treatment (for chemical agents).
  - Cover existing finished water reservoirs.
  - Fencing facility area.
  - Security cameras, lighting, and motion detectors.
  - Back-up or emergency systems (including power—if generator, must be non-portable).
  - Secure chemical and fuel storage.
  - Lab equipment.
  - Backflow prevention devices in distribution systems (must be owned and maintained by system).
  - Installing security hatches on reservoir or tank.
  - Protective measures identified as necessary through a cross-connection control program.
- With DOH approval, you may size projects to accommodate reasonable population growth and water system expansion (this is generally the 20-year projection in a Water System Plan or Small Water System Management Program). Please note that if growth and expansion is the primary purpose of your project, your project is ineligible for funding.

- Costs of complying with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
- DWSRF loan fees.
- Purchasing water production capacity from another water system, if that is the best solution for the project. This is limited to municipal water systems that are not using the additional water production capacity for future growth, but need the capacity to address a public health threat.
- Cleaning, sterilizing, or testing water system components to remove contamination before public use.
- Other direct costs associated with an eligible construction project, including costs for:
  - Materials and supplies.
  - Telephone.
  - Copying, printing, and advertising.
  - Using photography for surveying or map-making.
  - Video and photography for project documentation.
  - Computer usage.
  - Vehicle and equipment rental costs.
  - Competitive bidding.
  - Audit costs.
  - Construction insurance costs (not liability insurance).

Ineligible Projects

- Projects in which future population growth and water system expansion are the primary focus.
- Projects solely for pre-construction activities.
- Projects solely for studies or assessments.
- Restructuring (purchasing) costs incurred by privately owned systems.
- Point of use treatment devices for community systems and most noncommunity systems.
- Acquisition, construction, or rehabilitation of dams or raw water reservoirs.
- Individual projects for multiple water systems submitted as one application.
- Projects in which fire protection is the primary focus.

Ineligible Activities and Project Costs

- Water rights, except if the water rights are owned by a public water system that is being purchased through consolidation.
- Laboratory fees for monitoring.
- Operation and maintenance expenses (for example, reservoir cleaning, coating, and painting).
- Portable generators, tools, vehicles and other “rolling stock.”
- Indirect salaries, wages, and benefits for water system employees whose work falls outside of the scope of project construction.
- Liability insurance.
- Force account labor.

Application Evaluation Process

Eligibility Review

After we receive all applications by March 5, 2013, DOH conducts an initial eligibility review that includes:

- Checking completeness of application.
- Determining eligibility of applicant.
- Determining eligibility of proposed project.
- Ensuring the project is consistent with the Growth Management Act.

If we determine applicants or projects are ineligible, we remove the applications from funding consideration and send a letter explaining the reason for the ineligibility determination. You can appeal an ineligibility decision using the appeal process described below.

Appeal Process

When your proposed project does not meet all of the eligibility criteria and system capacity requirements, we disqualify the project from DWSRF funding program consideration. You have 10 working days from the date on the disqualification notification letter to send an appeal letter to the director of the DOH Office of Drinking Water.

The appeal letter should:

- Explain how the applicant's proposed project meets the DWSRF eligibility criteria and requirements.
- Include any supporting documentation.
- Request reconsideration of the application.

The director of the Office of Drinking Water will review the appeal letter and documentation and re-evaluate the project in light of any new information. When the director makes a decision about the appeal, we will notify the applicant in writing. The director's decision is final.

Planning Requirement Review

The DWSRF Loan Program requires your proposed project to be included in a DOH-approved Water System Plan or Small Water System Management Program. After you submit your application, DOH will determine your capacity eligibility requirements, and we will let you know what these are. For more information about the water system planning requirement, contact your DOH Regional Office (page 36).

Technical Evaluation (Scoring and Ranking)

After the eligibility screening, we will forward eligible applications to the DOH regional staff. They will score and rank the applications using the scoring system described in Appendix A. Regional staff conduct application scoring and ranking because of their technical and compliance knowledge about water systems. They also understand how the proposed project will protect public health.

A critical element of the application is the risk or problem the proposed project will eliminate. It is your responsibility to clearly document in the application any public health risks and compliance problems that are being addressed by the project. We may not consider unclearly presented information during scoring and ranking.

We use the criteria in Appendix A to score all eligible applications. Each project's score depends on a variety of factors. The most important factor is the Risk Category, which is the public health risk that the project addresses. An application can receive points in only one Risk Category and only one Project Type.

Here are the Risk Categories in priority order:

Risk Category 1	Microbial
Risk Category 2	Primary inorganic chemical
Risk Category 3	Other primary chemical
Risk Category 4	Secondary chemical or seawater intrusion
Risk Category 5	Infrastructure replacement, or other distribution improvements

We give bonus points for (also detailed in Appendix A):

Compliance:	The project meets documented compliance requirement
Restructuring benefit:	The project restructures (eliminates) one or more Group A system
Regional benefit:	The project benefits more than one Group A water system
Multiple benefits:	The project addresses more than one risk category
Affordability:	The applicant demonstrates the water rates are sufficient for operations
Service meters:	The project includes metering all unmetered services

After we score applications, we rank them from highest to lowest score. If projects receive identical scores, we use the largest population served by the proposed projects as a tiebreaker.

Next, DOH prepares a draft ranked funding list. We allocate available funding to projects receiving the highest scores and move down the list until we exhaust the funding. If funded projects are withdrawn or eliminated, lower scoring projects may move up into funding range. We don't guarantee you will receive funding. We encourage applicants who don't receive funding to reapply in the future or talk with us about other funding sources.

Financial Review

DOH sends the draft ranked funding list to the Public Works Board for a financial and readiness-to-proceed review of each applicant/project within the funding range. Staff conducts a financial review of each applicant to determine the ability to repay the loan. Public Works Board staff may conduct a financial review of any municipal applicant if needed.

If Public Works Board staff contact you for financial information, you must respond within 4 weeks, otherwise we may withdraw your project from funding consideration. Public Works Board will require:

- Copies of the borrower's tax returns for the past 3 years.
- Balance sheet statement for the past 3 years.
- Three professional or business references.
- Completed financial capacity worksheets.

Readiness-to-Proceed Review

The Public Works Board will work with you to find out whether your project is ready to proceed. The Board will ask you the following questions:

- Did you clearly define the scope of work?
- Are water rights in hand, and if not, will the schedule for securing water rights pose a barrier for moving forward in a timely manner?
- Is preliminary engineering completed?
- Are project permits obtained or in the process of being obtained?
- Is there a need to purchase land or right of way easements for the project? If yes, will condemnation or annexation be required?

Bypass Process

If the Public Works Board review shows an applicant can't repay the loan or the project is not ready to proceed, DOH and the Board may "bypass" or remove the applicant or project from funding consideration. Public Works Board staff will notify you that your project is being bypassed. If you don't agree with the bypass determination, you can request a review by the Board two weeks before a Board meeting. The Public Works Board meeting schedule is online at http://www.pwb.wa.gov/

The Board's decision on bypass status is final and cannot be appealed. If you are bypassed, we will offer you technical assistance so you can reapply for funding in the future or identify other funding opportunities.

Intended Use Plan

DWSRF Loan Program staff prepares the federally required draft Intended Use Plan each year that describes how we plan to use available DWSRF funds.

We announce the availability of the Draft Intended Use Plan for a 30-day public review and comment period by posting legal notices in major newspapers around the state, such as *The Olympian, Seattle Times*, *Yakima Herald*, and *Spokesman Review*. The announcement includes a date, time, and location for a public hearing. At the end of the public review and comment period, we hold a public hearing at our Tumwater Office, a site certified as barrier-free according to the federal *Americans with Disabilities Act.*

After the 30-day public review and comment period, we finalize and submit the *Intended Use Plan* to the US Environmental Protection Agency (EPA) as part of the DWSRF state capitalization grant application package. The Final Intended Use Plan contains a Final Prioritized Project List, which we will present to the Public Works Board for approval in the fall of 2013.
If an applicant does not agree with the final funding list, they can request a review by the Board. Written requests for a review must be received 2 weeks in advance of a Board meeting. A meeting schedule is online at http://www.pwb.wa.gov/ The Board's decision after this review is final.

Project Implementation

Your DWSRF Funding Contract

After the Board approves the final recommended funding list and EPA awards the capitalization grant, Public Works Board staff work with each applicant to prepare a DWSRF funding contract. After the applicant and the Board sign a DWSRF contract, the applicant becomes the borrower.

To finalize your contract, Public Works Board will mail you the contract which must be signed and returned within 60 days of the postmark date. You will receive training on how to comply with the contract requirements.

Please note that you must have the following before you begin construction:

- An executed contract (signed by both you and Public Works Board).
- Successful completion of the required environmental and cultural review (see below).
- DOH written approval of any required project report and construction documents.
- Bid specifications reviewed by CAU.

Environmental and Cultural Review

DOH has legal authority from EPA to ensure projects comply with the State Environmental Review Process (SERP) and the National Historic Preservation Act (Section 106). Although the SERP and Section 106 are two distinct processes, DOH will coordinate both reviews as much as possible. SERP is essentially a checklist of all environmental regulations, which encompasses the State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA).

All federally funded infrastructure projects must undergo an environmental review and a cultural review. Both reviews identify and analyze potential impacts a project might have on environmental, historical, and cultural resources. These reviews can take from 6 to 18 months and sometimes longer if any of the following apply:

- New ground will be disturbed
- Project will affect or is located near:
  - Known habitat of Endangered species
  - Contaminated soils
  - Body of water
  - Native American Reservation
  - Historic structures
  - Cultural resources
  - Environmental sensitive area (e.g., wetlands, shorelines)
- Requested documentation is not provided in a timely manner

The Washington State Department of Health (DOH) is the primacy agency for the Drinking Water State Revolving Fund program. As such, DOH leads in ensuring projects comply with the State Environmental Review Process (SERP) and the National Historic Preservation Act (Section 106).

For municipalities that are considered SEPA lead agency and are receiving DWSRF funding (federal funds) you are required to submit all documentation (EIS, DNS, SEPA Exemption Notice, etc.) to DOH for approval. In addition, state statute WAC 197-11-305 Categorical Exemptions does not pertain to federally funded projects. Water systems must complete a public comment period for all projects to be Categorical Exempted.

DOH will not initiate the reviews until after DWSRF contracts have been fully executed. Projects cannot move forward with any construction activities until both processes (*environmental and cultural reviews*) are complete and DOH has issued a Final Completion Letter.

DOH may request supplementary information, such as construction drawings, plans, publications, or other previously approved compliance documentation. Active participation from the borrower is essential in order for the processes to continue efficiently. If requested information is not forwarded in a timely manner, it will delay the process.

In accordance to 36 CFR 800, a government-to-government relationship must be properly adhered to for the cultural review. It is DOH's responsibility to contact the Tribes and the Washington State Department of Archaeology and Historic Preservation (DAHP).

DOH will also notify you if a Cultural Resources Survey is necessary. However, it is the borrower's responsibility to hire a certified entity to conduct the survey, and then submit a draft of the survey to DOH for final approval. Once the survey has been approved, DOH will inform the borrower how many copies to send for final distribution to the DAHP and interested tribe(s). The archeological survey contains confidential information and is not for general distribution.

For projects receiving additional state or federal funding, the more stringent environmental and cultural review process must be followed to comply with DWSRF requirements. It is imperative that the borrower inform DOH of any additional funding the project has received; and forward the necessary compliance documentation to DOH for review. DOH will coordinate with other identified funding agencies. However, any documentation that is more than five years old is not valid and is subsequently required to complete another review.

Cultural and Environmental Review Timetable

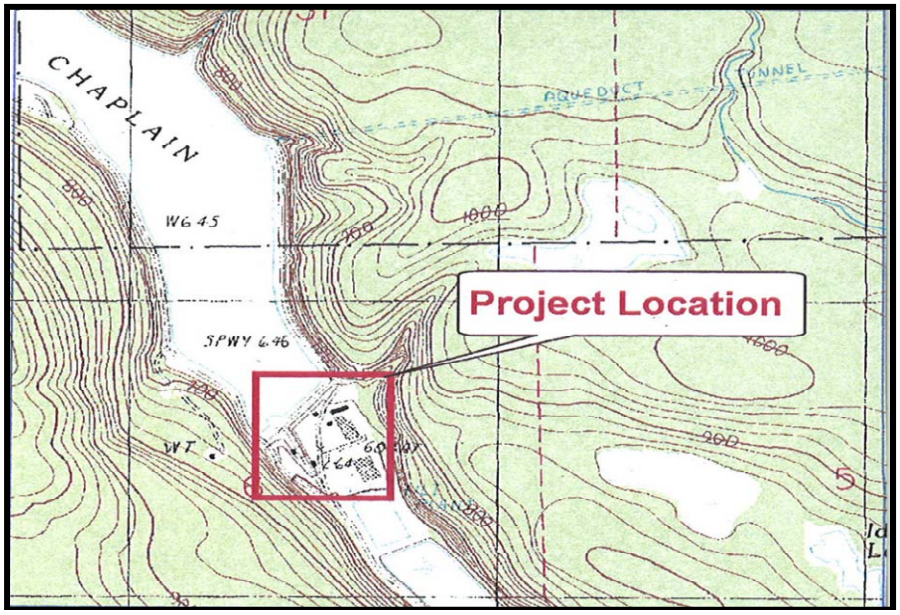
Activity	Responsibility	Timeframe
Execute DWSRF Loan Agreement	Borrow	Starting Point
Evaluate Project • Schedule site visit • Research Project Area at DAHP	DOH	Ongoing[1]
Make *Section 106* Determination • "No Historic Properties Affected" -OR- • "Potential Historic Adverse Effect" (a) complete survey, monitoring plan, and/or inadvertent discovery plan (b) additional consultation with DAHP and Tribes	DOH Borrower DOH	Ongoing[1] 3-6 months 6 - 18 months[2]
Forward Determination to Consulting Parties	DOH	30 days
Review Concurrence Letter(s)	DOH	20 days
Make or Receive *SEPA/NEPA* Determination • Categorical Exemption/Exclusion • SEPA Checklist/Environmental Impact Statements (EIS)	Borrower/DOH/Other Regulatory Agencies	Ongoing[2]
Public Comment Period • Publish SEPA and/or Section 106 Findings	Borrower	30 days[3]
Forward Final Completion Letter	DOH	15 days

[1] ***Revised project scope or other relative information may result in another review.***
[2] ***Timeframe depends on the significance of cultural/historic resources in vicinity of the project area.***
[3] ***Public comment period may run concurrently. If done separately, then public review 30 days for each process.***

To ensure that your cultural review is not delayed:

- Make sure to include your EZ-1 form with the application packet you send to us. The EZ1 form must include a United States Geological Survey (USGS) quadrangle map (7.5 minute series) with your project clearly identified on the map (see below).
- Make sure you EZ-1 Form is complete.
- Make sure your project location is clearly identified.
- Make sure your project description is detailed enough.
- Make sure the Township, Range, and Section information is correct.
- Only submit an EZ-2 form if you propose to modify/demolish a structure or a building. Please send it to DOH and not to the address on the form.

Submitting the Project Review Sheet (EZ-1 Form) ***only initiates*** the cultural review. There are additional steps required. (See Appendix C) The quad map required on the EZ-1 Form must clearly identify the project area. You must outline and label the entire project area. Below is an example:



Scope of Work Amendment – Potential Second Reviews

If a scope of work change includes any of the following, an additional environmental review and/or cultural review may be required:

- Increasing or changing the Area of Potential Effect
- Excavating at a deeper depth
- Adding new elements to the project activities
- Increasing the pipe size

The borrower must contact and forward a revised EZ-1 Form to DOH's SERP/Section 106 Lead to initiate a re-evaluation of the SERP/106 process. Construction activities for the revised scope of work are not allowed until DOH has determined whether all elements of the SERP/106 for the proposed change are completed, and a contract amendment has been fully executed.

DWSRF Contract Requirements

DOH and contracts staff will monitor each DWSRF contract for compliance. Borrowers must complete all funded projects within 4 years. To help ensure reasonable and timely project completion, accountability, and the proper use of funds, applicants must:

- Promptly submit requested materials and documentation, according to any stated deadlines and schedules, during all phases of the application and contract process.
- You must issue a Notice to Proceed with construction, provided the environmental and cultural reviews are completed.
- Submit required project reports and construction documents to your DOH Regional Office.
- Get DOH project approval before you begin construction.
- Use a competitive bid process (described in more detail in the Public Works Board DWSRF contract handbook)
- Comply with the federal Davis-Bacon Act (pay prevailing wages). Until 2009, we only required that funded projects comply with Washington State prevailing wage regulations. DWSRF is now required to comply with federal Davis-Bacon Act prevailing wage requirements. If you are funded, we will provide information on how to comply.
- Provide required quarterly project progress reports.
- If required in your contract, have an independent audit conducted and send the audit report to the Public Works Board within 60 days of project completion.
- Within 60 days of completing your project, have your project engineer complete a construction completion report and send it to DOH. The Construction Completion Report Form is online at http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/PublicationsandForms/Forms.aspx#engineering

We haven't received contract guidance from the federal government for compliance with Green Project Reserve or the Buy American Act. Once we get that information (late spring/early summer), we will revise our DWSRF Guidelines and place a notice on our website.

APPENDIX A
Project Scoring Procedures

We use the following criteria to score all eligible applications. An application receives points in only ***one*** Risk Category, and in only ***one*** Project Type.

RISK CATEGORY 1 **The proposed project will eliminate a documented Microbial Risk**	
TYPE OF PROJECT	**POINTS**
New Source	120
Source Reconstruction	115
Disinfection Improvements	110
Filtration	110
New Reservoir or Reservoir Improvements	100
BONUS POINTS	
Compliance Status	0 / 20 / 35
Restructuring	Unlimited
Regional Benefit	0 - 5
Multiple Benefit	0 - 4
Affordability	0 - 10
Service Meter Installation	0 / 2

To receive a score in this Risk Category, your project must address public health threats or compliance problems associated with:

- Total Coliform Rule—you have exceeded the maximum contaminant level (MCL) for coliform during several months over the past year.
- Surface Water Treatment Rule—your water source is at risk for microbial pathogens.
- Ground Water Rule—fecal indicators are present in the raw water
- Uncovered reservoirs

In addition, your project must be one of the following types of projects:

- Disinfection or filtration projects to address the documented problem
- Source reconstruction or replacement to address the documented problem
- Installation of larger diameter piping to satisfy a chlorine contact time requirement
- Reservoir replacement if reservoir is currently uncovered
- Reservoir replacement if the water system is currently a coliform “significant non-complier” (SNC) and replacement is needed to address the documented problem
- Reservoir construction to satisfy a chlorine contact time requirement.

RISK CATEGORY 2 **The proposed project eliminates Primary Inorganic Chemical Risk**	
TYPE OF PROJECT	**POINTS**
New Source	115
Source Reconstruction	110
Treatment	105
BONUS POINTS	
Compliance Status	0 / 20 / 35
Restructuring	unlimited
Regional Benefit	0 - 5
Multiple Benefit	0 - 4
Affordability	0 - 10
Service Meter Installation	0 / 2

To receive a score in this Risk Category, your project must address compliance problems IMCL, TT, or Action Level) Exceedances/violations associated with:

- Antimony (Sb)
- Arsenic (As)
- Asbestos
- Barium (Ba)
- Beryllium (Be)
- Cadmium (Cd)
- Chromium (Cr)
- Copper (Cu)
- Cyanide (HCN)
- Fluoride (F) (exceedance of 4.0 mg/l MCL)
- Lead (Pb)
- Mercury (Hg)
- Nickel (Ni)
- Nitrate (as N)
- Nitrite (as N)
- Selenium (Se)
- Thallium (Tl)

RISK CATEGORY 3 The proposed project eliminates Other Primary Chemical Risk	
TYPE OF PROJECT	**POINTS**
New Source	105
Treatment	100
Other	65-70
BONUS POINTS	
Compliance Status	0 / 20 / 35
Restructuring	Unlimited
Regional Benefit	0 - 5
Multiple Benefit	0 - 4
Affordability	0 - 10
Service Meter Installation	0 / 2

To receive a score in this Risk Category, your project must address compliance problems IMCL, TT, or Action Level Exceedances/violations associated with:

- Disinfection by-Products
- Radionuclides
- Organic chemicals

RISK CATEGORY 4 The proposed project eliminates Secondary Chemical or Seawater Intrusion Risk	
TYPE OF PROJECT	**POINTS**
New Source	50
Treatment	45
BONUS POINTS	
Compliance Status	0 / 10 / 35
Restructuring	unlimited
Regional Benefit	0 - 5
Multiple Benefit	0 - 4
Affordability	0 - 10
Service Meter Installation	0 / 2

Examples of Secondary Chemical / Sea Water Intrusion Risk:

- Chloride (Cl)
- Fluoride (F) (exceedance of 2.0 mg/l MCL)
- Iron (Fe)
- Manganese (Mn)
- Silver (Ag)
- Sodium (Na)
- Sulfate (SO4)
- Zinc (Zn)

RISK CATEGORY 5 **The proposed project is Infrastructure Sustainability**	
TYPE OF PROJECT	**POINTS**
Source (new or additional) Distribution Reservoir (new or additional)	40
Main / Distribution Improvements / Booster Pump / Seismic Improvements	35
Cross-connection control—installation of backflow prevention assemblies (stand-alone project)	30
Installation of pressure reduction device (stand-alone project)	25
Security Measures (stand-alone project)	20
Treatment Plant Discharge Improvements	5
Other (such as telemetry, additional source)	5 10 20 25 30
BONUS POINTS	
Compliance Status	0 / 10 / 35
Restructuring	unlimited
Regional Benefit	0 - 5
Multiple Benefit	0 - 4
Affordability	0 - 10
Service Meter Installation	0 / 2

Examples:

- Create redundancy
- Replace treatment equipment
- Install additional distribution reservoir
- Install treatment plant discharge improvements
- Install pressure reduction device(s)
- Install backflow prevention device(s)
- Security measures (cameras, fencing, lighting, lab equipment, chemical storage) not included as part of a category 1-4 project
- Replace infrastructure
- Replace roof for reservoir and other structures
- Other distribution improvements

More Scoring Information

We rank the list from highest to lowest score, with microbial risk (Risk Category 1) rated highest and infrastructure replacement (Risk Category 5) rated lowest. We base the Risk Category on the primary risk the proposed project will address.

Compliance

We award bonus points to projects that eliminate a compliance problem. We will review our records to determine whether a system is under an active enforcement action.

- We award the highest point value in each Risk Category to projects that address an active enforcement action (including DOH departmental order, penalty, or bilateral compliance agreement or federal administrative order or stipulated penalty).
- We award the middle point value in each Risk Category to projects that eliminate an existing or potential problem that would place the system out of compliance, or eliminate a red, yellow, or blue operating permit related to infrastructure (when the water system is not subject to an active enforcement action).

Restructuring benefit

We award bonus points to projects that result in restructuring (eliminating) Group A water systems. We will give three bonus points for each system eliminated by the project, with no limit to the amount of bonus points allowed.

Regional benefit

We award bonus points to projects that will benefit more than one Group A water system. We will give one bonus point for each additional system benefiting from the project, up to five points.

Multiple benefits

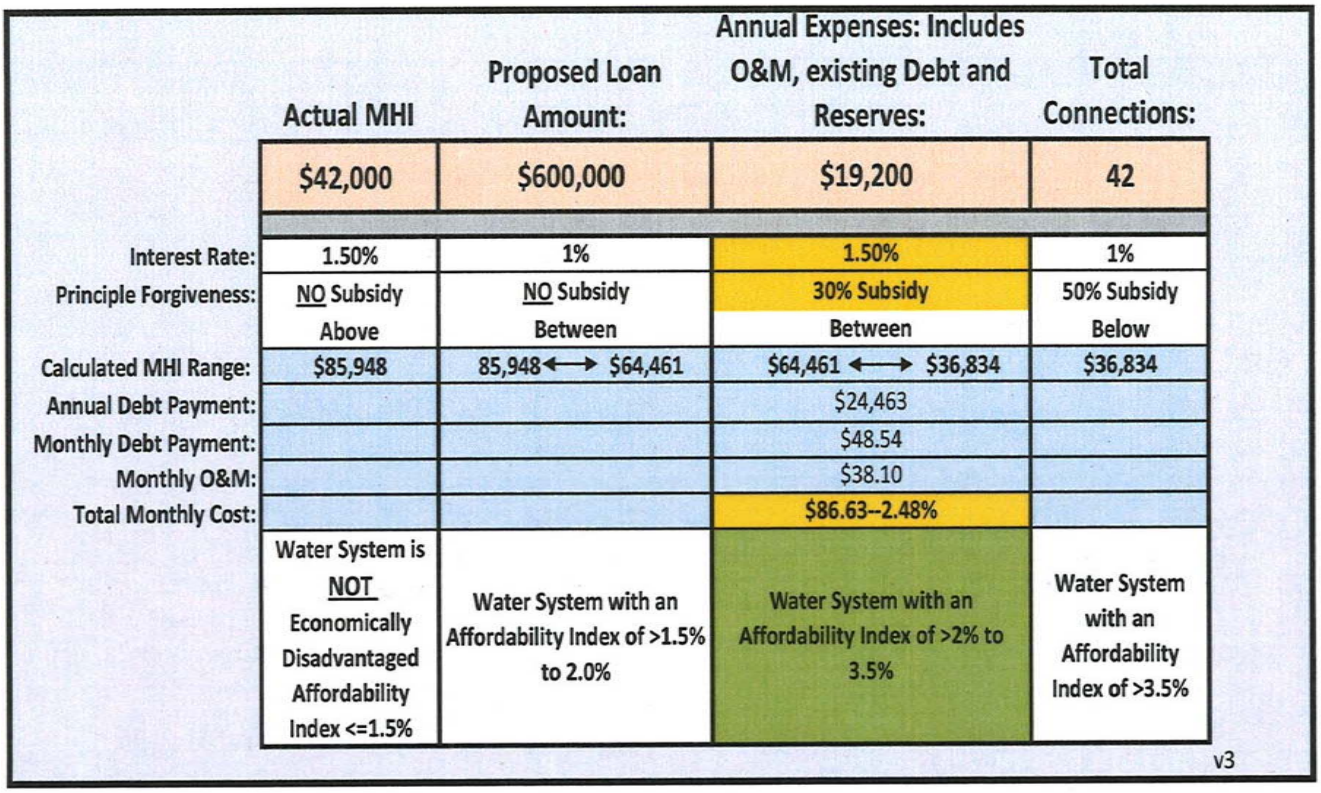
We award bonus points to projects that address more than one risk category. We will give one bonus point for each additional risk category addressed by the project, up to four points.

Affordability

We award up to 10 bonus points if the applicant can demonstrate its water system rates are appropriate and support its financial viability. We calculate points during eligibility review using a formula that considers:

- The water system's median household income.
- The system's water rates.

To apply for bonus points, submit documentation of your current annual water rates. You may use rates identified in a water system planning document or project report, or rates formally approved by the water system board or commission as documentation.



	Actual MHI	Proposed Loan Amount:	Annual Expenses: Includes O&M, existing Debt and Reserves:	Total Connections:
	$42,000	$600,000	$19,200	42
Interest Rate:	1.50%	1%	1.50%	1%
Principle Forgiveness:	NO Subsidy Above	NO Subsidy Between	30% Subsidy Between	50% Subsidy Below
Calculated MHI Range:	$85,948	85,948 ←→ $64,461	$64,461 ←→ $36,834	$36,834
Annual Debt Payment:			$24,463	
Monthly Debt Payment:			$48.54	
Monthly O&M:			$38.10	
Total Monthly Cost:			$86.63--2.48%	
	Water System is NOT Economically Disadvantaged Affordability Index <=1.5%	Water System with an Affordability Index of >1.5% to 2.0%	Water System with an Affordability Index of >2% to 3.5%	Water System with an Affordability Index of >3.5%

v3

Below is the monthly cost and affordability index with a 1.5% loan using the above entries
Monthly cost: $107.44 AI: 3.07%

The MHI can be used from the most recent census of your water system area (US Census 2010) or an income survey from your customers.

To apply for subsidy using your Affordability Index, please submit documentation of your actual MHI, your proposed loan amount, your annual expenses including your O&M, your existing debt and reserves, and the total number of connections.

Service Meters

For systems not fully metered, we will award two bonus points if the project includes metering all unmetered services.

APPENDIX B
Source Documents and Useful Publications

Useful Publications

Small Water System Management Program Guide, DOH 331-134

Public Works Board Drinking Water State Revolving Fund Loan Program Contract Manual

Environmental Authorities

Archaeological & Historic Preservation Act of 1974, Pub. L. 86-523, as amended

Clean Air Act, Pub. L. 84-159, as amended

Coastal Barrier Resources Act, Pub. L. 92-583, as amended

Endangered Species Act, Pub. L. 93-205, as amended

Environmental Justice, Executive Order 12898

Native American Graves Protection and Repatriation Act

Floodplain Management Executive Order 11934, as amended by Executive Order 12148

Protection of Wetland, Executive Order 11990

Farmland Protection Policy Act, Pub. L. 97-98

Fish & Wildlife Coordination Act, Pub. L. 85-624, as amended

National Historic Preservation Act of 1966, Pub L. 89-665, as amended

National Environmental Policy Act (NEPA)

Safe Drinking Water Act, Pub. L. 93-523, as amended

Wild & Scenic Rivers Act, Pub. L. 90-542, as amended

Social Policy Authorities

Age Discrimination Act of 1975, Pub. L. 94-135

Title VI of Civil Rights Act of 1964, Pub. L. 88-135

Section 13 of the Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500 (the Clean Water Act)

Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112 (including executive Orders 11914 and 11250)

Equal Employment Opportunity, Executive Order 11246

Women’s and Minority Business Enterprise, Executive Orders 11625, 12138 and 12432

Section 129 of the Small Business Administration Reauthorization and Amendment Act of 1988, Pub. L. 100-590

Anti-Lobbying Provision (40 CFR Part 30)—applies only to capitalization grant recipients

Economic and Miscellaneous Authorities

Davis-Bacon Act (federal prevailing wage requirements) US Code - title 40, subtitle II, part A, chapter 31, subchapter IV; and 29 CFR 5.5 (US Dept. of Labor regulations)

Demonstration Cities & Metropolitan Development Act of 1966, Pub. L. 89-754, as amended, Executive Order 12372

Procurement Prohibitions under Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, including Executive Order 11738, Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans

Uniform Relocation & Real Property Acquisition Policies Act, Pub. L. 91-646, as amended

Debarment & Suspension, Executive Order 12549

State Laws

Archaeological and Cultural Resources, Governor's Executive Order 05-05

Chapter 36.70A RCW, Growth Management Act (GMA)

Chapter 39.80 RCW, Contracts for Architectural & Engineering Services

Chapter 43.20 RCW, State Board of Health

Chapter 43.70 RCW, Department of Health

Chapter 42.56.300 RCW, Archaeological Site Public Disclosure Exemption

Chapter 27.44 RCW, Indian Graves and Records

Chapter 70.116 RCW, Public Water Systems Coordination Act of 1977

Chapter 70.119 RCW, Public Water Supply Systems Certification & Regulation of Operations

Chapter 70-119A RCW, Public Water Systems, Penalties & Compliance

Chapter 197-11 WAC and Chapter 43.21C RCW, State Environmental Policy Act (SEPA)

Chapter 246-290 WAC, Group A Public Water Systems

Federal CFR Title 40 Part 131, [Federal National Primary Drinking Water Regulations]-Section Adopted by Reference

Chapter 246-291 WAC, Group B Public Water Systems

Chapter 246-292 WAC, Waterworks Operator Certification Regulations

Chapter 246-293 WAC, Water System Coordination Act

Chapter 246-294 WAC, Drinking Water Operating Permits

Chapter 246-295 WAC, Satellite System Management Agencies

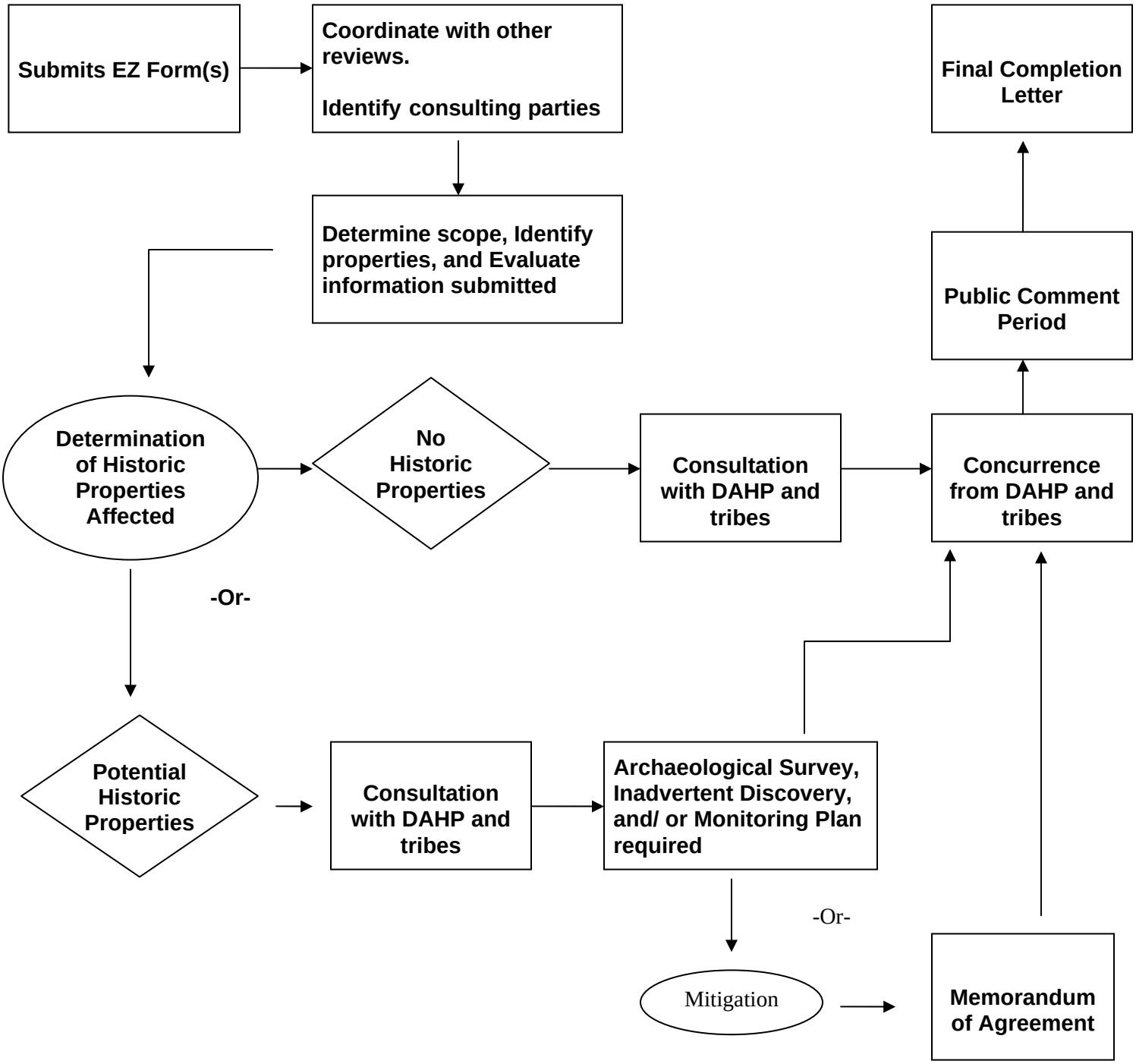
Chapter 246-296 WAC, Drinking Water State Revolving Fund (and amended WSR 01-21-137 Emergency Rule for DWSRF)

Chapter 173-160 WAC, Minimum Standards for Construction & Maintenance of Wells

Chapter 25.48 WAC, Archaeological Excavation and Removal Permit

Title 173, Department of Ecology Rules

APPENDIX C
Cultural Review Flow Chart



APPENDIX D
Green Project Reserve

State SRF programs are responsible for identifying projects that count toward GPR. The following overarching principles, or decision criteria, apply to all projects that count toward GPR and will help states identify projects.

All GPR projects and activities must otherwise be eligible for DWSRF funding. The GPR requirement does not create new funding authority beyond that described in Section 1452 of the SDWA.

0.2 GPR projects and activities must meet the definition of one of the four GPR categories. The individual GPR categories do not create new eligibility for the DWSRF. The projects that count toward GPR must otherwise be eligible for DWSRF funding.

0.3 GPR projects and activities must further the goals stated in Section 1452 of the Safe Drinking Water Act.

0.4 Projects and activities that utilize the DWSRF set-asides can also be eligible for GPR. Planning and assessment activities, such as conducting water or energy audits, are eligible, as well as green-oriented capacity development, source water protection, and total/integrated water resources management planning activities. Where applicable, the pertinent set-asides that can be used are noted in the next section.

DWSRF Technical Guidance

The following sections outline the technical aspects for the DWSRF Green Project Reserve. It is organized by the four categories of green projects: green infrastructure, water efficiency, energy efficiency, and environmentally innovative activities. Categorically green projects are listed, as well as projects that are ineligible. Design criteria for business cases and example projects that would require a business case are also provided.

Green Infrastructure

1.1 Definition: Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site- and neighborhood-specific practices, such as bioretention, trees, green roofs, permeable pavements, and cisterns.

1.2 Categorical Projects

The following types of projects, done at a utility-owned facility or as part of a water infrastructure project, can be counted toward the GPR if they are a part of an eligible DWSRF project:

1.2-1 Pervious or porous pavement

1.2-2 Bioretention.

1.2-3 Green roofs

1.2-4 Rainwater harvesting/cisterns

1.2-5 Gray water use
1.2-6 Xeriscape
1.2-7 Landscape conversion programs
1.2-8 Moisture and rain sensing irrigation equipment

1.3 Projects That Do Not Meet the Definition of Green Infrastructure
1.3-1 Stormwater controls that have impervious or semi-impervious liners and provide no compensatory evapotranspirative or harvesting function for stormwater retention.
1.3-2 Stormwater ponds that serve an extended detention function and/or extended filtration. This includes dirt lined detention basins.
1.3-3 In-line and end-of-pipe treatment systems that only filter or detain stormwater.
1.3-4 Underground stormwater control and treatment devices such as swirl concentrators, hydrodynamic separators, baffle systems for grit, trash removal floatables, oil and grease, inflatable booms and dams for in-line underground storage and diversion of flows.
1.3-5 Stormwater conveyance systems that are not soil/vegetation based (swales) such as pipes and concrete channels. Green infrastructure projects that include pipes to collect stormwater may be justified as innovative environmental projects pursuant to Section 4.4 of this guidance.

1.4 Decision Criteria for Business Cases
1.4-1 Green infrastructure projects are designed to mimic the natural hydrologic conditions of the site or watershed.
1.4-2 Projects capture, treat, infiltrate, or evapotranspire stormwater on the parcels where it falls and does not include inter. basin transfers of water.
1.4-3 GPR project is in lieu of or to supplement municipal hard/gray infrastructure.
1.4-4 Projects considering both landscape and site scale will be most successful at protecting water quality.

Water Efficiency
2.1 Definition: EPA's WaterSense program defines water efficiency as the use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future.

2.2 Categorical Projects
2.2-1 Installing or retrofitting water efficient devices such as plumbing fixtures and appliances
2.2-la For example - showerheads, toilets, urinals, and other plumbing devices
2.2-1b Implementation of incentive programs to conserve water such as rebates
2.2-lc WaterSense labeled products (http://www.epa.gov/watersense/index.html)
2.2-2 Installing any type of water meter in previously unmetered areas:
2.2-2a If rate structures are based on metered use,
2.2-2b Can include backflow prevention devices if installed in conjunction with water meter.
2.2-3 Replacing existing broken/malfunctioning water meters with:
2.2-3a Automatic meter reading systems (AMR), for example:
2.2-3a(i) Advanced metering infrastructure (AMI).
2.2-3a(ii) Smart meters.
2.2-3b Meters with built in leak detection.
2.2-3c Can include backflow prevention devices if installed in conjunction with water meter replacement.

2.2-4 Retrofitting/adding AMR capabilities or leak equipment to existing meters (not replacing the meter itself).

2.2-5 Conducting water utility audits, leak detection studies, and water use efficiency baseline studies, which are reasonably expected to result in a capital project or in a reduction in demand to alleviate the need for additional capital investment.

2.2-5a Funded through set-asides: Small Systems Technical Assistance, State Program Management - Capacity Development, or Local Assistance. & Other State Programs - Capacity Development; where consistent with the state capacity development strategy

2.2-5b For standard practices, see AWWA M36 Water Audits and Loss Control Programs.

2.2-6 Developing conservation plans/programs reasonably expected to result in a water conserving capital project or in a reduction in demand to alleviate the need for additional capital investment.

2.2-6a Funded through set-asides: Small Systems Technical Assistance, State Program Management - Capacity Development, or Local Assistance & Other State Programs - Capacity Development; where consistent with the state capacity development strategy

2.2-6b For standard practices, see AWWA M52 Water Conservation Programs- A Planning Manual

2.2-7 Recycling and water reuse projects that replace potable sources with non-potable sources,

2.2-7a Gray water, condensate, and wastewater effluent reuse systems (where local codes allow the practice).

2.2-7b Extra treatment costs and distribution pipes associated with water reuse.

2.2-8 Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems, including moisture and rain sensing controllers.

2.2-9 Projects that result from a water efficiency related assessments (such as water audits, leak detection studies, conservation plans, etc) as long as the assessments adhered to the standard industry practices referenced above.

2.2-10 Distribution system leak detection equipment, portable or permanent.

2.2-11 Automatic flushing systems (portable or permanent).

2.2-12 Pressure reducing valves (PRVs).

2.2-13 Internal plant water reuse (such as backwash water recycling).

2.3 Projects That Do Not Meet the Definition of Water Efficiency

2.3-1 Covering open finished water reservoirs - Federally mandated, so not considered "above and beyond."

2.4 Decision Criteria for Business Cases

2.4-1 Water efficiency can be accomplished through water saving elements or reducing water consumption. This will reduce the amount of water taken out of rivers, lakes, streams, groundwater, or from other sources.

2.4-2 Water efficiency projects should deliver equal or better services with less net water use as compared to traditional or standard technologies and practices.

2.4-3 Efficient water use often has the added benefit of reducing the amount if energy required by a drinking water system, since less water would need to be treated and transported; therefore, there are also energy and financial savings.

2.4-4 Proper water infrastructure management should address where water losses could be occurring in the system and fix or avert them. This could be achieved, for example, by making operational changes or replacing aging infrastructure.

2.5 Example Projects Requiring a Business Case

2.5-1 Water meter replacement with traditional water meters (see AWWA M6 Water Meters - Selection, Installation, Testing, and Maintenance).

2.5-2 Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks (see A WW A M28 Rehabilitation of Water Mains).

2.5-3 Storage tank replacement/rehabilitation to reduce water loss.

2.5-4 New water efficient landscape irrigation system.

Energy Efficiency

3.1 Definition: Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water projects, use energy in a more efficient way, and/or produce/utilize renewable energy.

3.2 Categorical Projects*

3.2-1 Renewable energy projects, which are part of a larger public health project, such as wind, solar, geothermal, and micro-hydroelectric that provide power to a utility (http:///www.epa.gov/cleanenergy). Micro-hydroelectric projects involve capturing the energy from pipe flow.

3.2-la Utility-owned renewable energy projects can be located on-site or off-site.

3.2-1 b Includes the portion of a publicly owned renewable energy project that serves the utility's energy needs.

3.2-lc Must feed into the grid that the utility draws from and/or there is a direct connection.

3.2-2 Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas, which are reasonably expected to result in energy efficiency capital projects or in a reduction in demand to alleviate the need for additional capital investment.

3.2-2a Funded through set-asides: Small Systems Technical Assistance, State Program Management - Capacity Development, or Local Assistance & Other State Programs - Capacity Development; where consistent with the state capacity development strategy

3.2-2b For standard energy management practices, see *Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities*, located at http://www.epa.gov/waterinfrastructure/pdfs/guidebook_si_energymanagement.pdf

3.2-2c Energy Efficiency Step-By-Step Guide online at http://www.epa.gov/region09/waterinfrastructure/howto.html

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* EPA has concluded that existing literature does not support a 20 percent energy efficiency improvement threshold for drinking water systems; therefore, there is no categorical 20 percent threshold for pumping/treatment systems for the DWSRF. A business case is required.

3.3 Projects That Do Not Meet the Definition of Energy Efficiency

3.3-1 Simply replacing a pump, or other piece of equipment, because it is at the end of its useful life, with something of average efficiency. (Note: replacing it with higher efficiency equipment requires a business case)

3.3-2 Hydroelectric facilities, except micro-hydroelectric projects. Micro-hydroelectric projects involve capturing the energy from pipe flow.

3.4 Decision Criteria for Business Cases

3.4-1 Projects should include products and practices which will decrease environmental impacts, such as reducing greenhouse gas emissions, and provide financial savings.

3.4-2 Projects should include approaches to integrate energy efficient practices into daily management and long-term planning (http://www.epa.gov/waterinfrastructure/)

3.4-3 Operator training in conjunction with any energy savings project is strongly encouraged in order to maximize the energy savings potential.

3.4-4 Using existing tools such as Energy Star's Portfolio Manager (http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager) or Check Up Program for Small Systems (CUPSS) (http://www.epa.gov/cupss/) to document current energy usage and track anticipated savings.

3.5 Example Projects Requiring a Business Case

3.5-1 Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs).

3.5-2 Pump refurbishment to optimize pump efficiency (such as replacing or trimming impellers if pumps have too much capacity, replacing damaged or worn wearing rings/seals/bearings, etc.).

3.5c3 Projects that result from an energy efficiency related assessments (such as energy audits, energy assessment studies, etc), that are not otherwise designated as categorical.

3.5-4 Projects that cost effectively eliminate pumps or pumping stations.

3.5-5 Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.

3.5-6 Upgrade of lighting to energy efficient sources (such as metal halide pulse start technologies, compact fluorescent, light emitting diode, etc).

3.5-7 Automated and remote control systems (SCADA) that achieve substantial energy savings (see AWWA M2 Instrumentation and Control).

Environmentally Innovative

4.1 Definition: Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way.

4.2 Categorical Projects

4.2-1 Total/integrated water resources management planning, or other planning framework where project life cycle costs (including infrastructure, energy, and other operational costs) are minimized, which enables communities to adopt more efficient and cost-effective infrastructure solutions.

4.2-1a Funded through set-asides: Small Systems Technical Assistance, State Program Management, or Local Assistance & Other State Programs.

4.2-1 b Plans to improve water quantity and quality associated with water system financial, and managerial capacity.

4.2-1 c Eligible source water protection planning.

4.2-1c(i) Periodic, updated, or more detailed source water delineation or assessment as part of a more comprehensive source water protection program.

4.2-1c(ii) Source water monitoring (not compliance monitoring) and modeling as part of a more comprehensive source water protection program.

4.2-1c(iii) http://www.epa.gov/ogwdw/dwsrf/pdfs/dwsrf_congressreport-main.pdf

4.2-1d Planning activities by a utility to prepare for adaptation to the long-term effects of climate change and/or extreme weather.

4.2-1d(i) Office of Water - Climate Change and Water website: http://www.epa.gov/water/climatechange/

4.2-2 Utility Sustainability Plan consistent with EPA's SRF sustainability policy.

4.2-3 Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry (such as Climate Leaders or Climate Registry), as long as it is being done for a facility which is eligible for DWSRF assistance.

4.2-3a EPA Climate Leaders- http://www.epa.gov/climateleaders/basic/index.html

4.2-3b Climate Registry - http://www.theclimateregistry.org/

4.2-4 Source Water Protection Implementation Projects

4.2-4a Voluntary, incentive based source water protection measures pursuant to Section 1452(k)(I)(A)(ii), where the state primacy agency has determined that the use of such measures will reduce or preclude the need for treatment. Under the FY 20 I 0 appropriation, additional subsidization for these measures may be provided in the form of principal forgiveness or negative interest rate loans.

4.2-5 Construction of US Building Council LEED certified buildings, or renovation of an existing building, owned by the utility, which is part of an eligible DWSRF project.

4.2-5a Any level of certification (Platinum, Gold, Silver, Certified).

4.2-5b All building costs are eligible, not just stormwater, water efficiency and energy efficiency related costs. Costs are not limited to the incremental additional costs associated with LEED certified buildings.

4.2-5c http://www.usgbc.org/DisplayPage.aspx?CategoryID=19

4.3 Projects That Do Not Meet the Definition of Environmentally Innovative

4.3-1 Higher sea walls to protect water infrastructure facilities from sea level rise.

4.3-2 Reflective roofs at water infrastructure facilities to combat heat island effect.

4.4 Decision Criteria for Business Cases

4.4-1 State programs are allowed flexibility in determining what projects qualify as innovative in their state based on unique geographical and climatological conditions.

4.4-la Technology or approach whose performance is expected to address water quality but the actual performance has not been demonstrated in the state; or

4.4-1 b Technology or approach that is not widely used in the state, but does perform as well or better than conventional technology/approaches at lower cost; or

4.4-lc Conventional technology or approaches that are used in a new application in the state.

4.5 Example Projects Requiring-A Business Case

4.5-1 Projects, or components of projects, that result from total/integrated water resources management planning (including climate change) consistent with the Decision Criteria for environmentally innovative projects and that are DWSRF eligible, for example:

4.5-2 Application of innovative treatment technologies or systems that improve environmental conditions and are consistent with the Decision Criteria for environmentally innovative projects, such as: [add alleviate demand comment from American Rivers]

4.5-2a Projects that significantly reduce or eliminate the use of chemicals in water treatment.

4.5-2b Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals (Cornwell, 2009; Water Treatment Residuals Engineering; Water Research Foundation).
4.5-2c Trenchless or low impact construction technology.
4.5-2d Using recycled materials or re-using materials on-site.
4.5-3 Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).
4.5-4 Projects that achieve the goals/objectives of utility asset management plans (http://water.epa.gov/type/drink/pws/smallsystems/index.cfm)

DWSRF Business Case Development

This guidance is intended to be comprehensive; however, EPA understands our examples projects requiring a business case may not be all inclusive. A business case is a due diligence document. For those projects, or portions of projects, which are not included in the categorical projects lists provided above, a business case will be required to demonstrate that an assistance recipient has thoroughly researched anticipated 'green' benefits of a project. Business cases will be approved by the State (see Section III.A. in the Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2010 Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs). An approved business case must be included in the State's project files and contain clear documentation that the project achieves identifiable and substantial benefits. The following sections provide guidelines for business case development.

5.0 Length of a Business Case
5.0-1 Business cases should be adequate but not exhaustive.
5.0-la There are many formats and approaches. EPA does not require any specific one.
5.0-1 b Some projects will require detailed analysis and calculations, while others many not require more than one page.
5.0-lc Limit the information contained in the business case to only the pertinent 'green' information needed to justify the project.
5.0-2 A business case can simply summarize results from, and then cite, existing documentation - such as engineering reports, water or energy audits, results of water system tests, etc.

5.1 Content of a Business Case
5.1-1 Business cases must address the decision criteria for the category of project.
5.1-2 Quantifiable water and/or energy savings or water loss reduction for water and energy efficiency projects should be included.
5.1-3 The cost and financial benefit of the project should be included, along with the payback time period, where applicable.

5.2 Items Which Strengthen Business Case, but Are Not Required
5.2-1 Showing that the project was designed to enable equipment to operate most efficiently.
5.2-2 Demonstrating that equipment will meet or exceed standards set by professional associations.
5.2-3 Including operator training or committing to utilizing existing tools such as Energy Star's Portfolio Manager or CUPSS for energy efficiency projects.

For more information

Drinking Water State Revolving Fund Loan Program

Department of Health	Contact	Karen Klocke
Office of Drinking Water	Phone	360-236-3116 or 1-800-521-0323
PO Box 47822	FAX	360-236-2252
Olympia, WA 98504-7822	Email	dwsrf@doh.wa.gov

Website:
http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/DrinkingWaterStateRevolvingFundDWSRF.aspx

DWSRF Online Loan Application Help

Department of Health	Contact	Sara Herrera
Office of Drinking Water	Phone	360-236-3089 or 1-800-521-0323
PO Box 47822	FAX	360-236-2252
Olympia, WA 98504-7822	Email	sara.herrera@doh.wa.gov

State Environmental Review Process and Section 106 of the National Historic Preservation Act

Department of Health	Contact	Aleceia Tilley, SERP & Cultural Review Lead
Office of Drinking Water	Phone	360-236-3095 or 1-800-521-0323
PO Box 47822	FAX	360-236-2252
Olympia, WA 98504-7822	Email	aleceia.tilley@doh.wa.gov

Project scope of work, regulatory requirements, project reports, construction documents, or planning requirements

Northwest Regional Office	Southwest Regional Office	Eastern Regional Office
20425 72nd Ave S, Suite 310	PO Box 47823	16201 E. Indiana Ave., Suite 1500
Kent, WA 98032	Olympia, WA 98504-7823	Spokane Valley, WA 99216
253-395-6750	360-236-3030	509-329-2100

Financial and readiness-to-proceed review or DWSRF contracts

Public Works Board	Contact	Chris Gagnon
PO Box 48319	Phone	360-725-3158
Olympia, WA 98504-8319	Email	christina.gagnon@commerce.wa.gov
	Website	http://www.pwb.wa.gov

Free Technical Assistance for Small Water Systems

Evergreen Rural Water of Washington 1-800-272-5981
Website: http://www.erwow.org

Rural Community Assistance Corporation 509-927-6748
Website: http://www.rcac.org

Information about Grants and Loans

To receive additional information about other grants and loans that may be available to you, call 360-236-3124 or use the Infrastructure Assistance Coordination Council's free funding database at http://www.infrafunding.wa.gov/

If you need this publication in alternate format, call 1-800-525-0127. For TTY/TDD, call 1-800-833-6388.